(19) World Intellectual Property Organization International Bureau





(43) International Publication Date 7 April 2005 (07.04.2005)

PCT

(10) International Publication Number WO 2005/030804 A2

(51) International Patent Classification⁷:

C07K 14/705

(21) International Application Number:

PCT/DK2004/000659

(22) International Filing Date:

29 September 2004 (29.09.2004)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data: pa 2003 01418 30 September 2003 (30.09.2003) DK

(71) Applicant (for all designated States except US): ENKAM PHARMACEUTICALS A/S [DK/DK]; Fruebjergvej 3, DK-2100 Copenhagen Ø (DK).

(72) Inventors; and

- (75) Inventors/Applicants (for US only): BOCK, Elisabeth [DK/DK]; Tonysvej 20, DK-2920 Charlottenlund (DK). BEREZIN, Vladimir [UA/DK]; Nørrebrogade 223, 1.th., DK-2200 Copenhagen N (DK). SOROKA, Vladyslav [UA/DK]; Olivenlunden 43, Høje Taastrup (DK).
- (74) Agent: HØIBERG A/S; St. Kongensgade 59 A, DK-1264 Copenhagen_K (DK).
- (81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG,

PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

(84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Declaration under Rule 4.17:

as to applicant's entitlement to apply for and be granted a patent (Rule 4.17(ii)) for the following designations AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE. EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, UZ, VC, VN, YU, ZA, ZM, ZW, ARIPO patent (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG)

Published:

 without international search report and to be republished upon receipt of that report

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: A METHOD OF MODULATING CELL SURVIVAL, DIFFERENTIATION AND/OR SYNAPTIC PLASTICITY

(57) Abstract: The present invention relates to a method of modulating differentiation, adhesion and/or survival of the neural cell adhesion molecule (NCAM) presenting cells by providing compounds capable of modulating the interaction between the Ig1, Ig2 and/or Ig3 modules of NCAM. The invention provides candidate compounds capable of modulating the interaction between the Ig1, Ig2 and/or Ig3 modules of NCAM by using methods for screening and testing described in the application. The invention further relates to pharmaceutical compositions comprising compounds capable of modulating the interaction between the Ig1, Ig2 and/or Ig3 modules of NCAM and to use of the pharmaceutical compositions and compounds for the modulation of differentiation, adhesion and/or survival of NCAM presenting cells.

